

## Crater Lake National Park Lichen Species List

This list is based on the NPS data base for National Parks, NPLichen, and on determinations made by lichen specialists for a BioBlitz survey conducted by the Science and Learning Center at Crater Lake National Park in August, 2008. Sixty-four (64) species were previously identified by NPLichen (NPL in the list) and a total of 37 records were added by the BioBlitz (BB-08).

Lichens from the 2008 BioBlitz were identified by:

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Species and Reference	NPL	BB-08
<i>Acaraspora americana</i> H. Magn. [MIN Herb.]	X	
<i>Acaraspora fuscata</i> (Schrader) Arnold [Sipe, 1943; MIN Herb.]	X	
<i>Acaraspora smaragdula</i> (Wahlb.) A. Massal [Sipe, 1943]	X	
<i>Ahtiana pallidula</i> (Tuck. ex Riddle) Goward & Thell [JV, 2008]		X
<i>Ahtiana imshaugii</i> (Brodo & D. Hawksworth) [RD, KM, JV, 2008]		X
<i>Alectoria sarmentosa</i> (Ach.) Ach. [CRLA park list; MIN herb.]	X	
<i>Aspicilia cinerea</i> (L.) Körber [Sipe, 1943]	X	
<i>Bellemerea cinerorufscens</i> (Ach.) Clauzade & Cl. Roux [Sipe, 1943]	X	
<i>Bellemerea sanguinea</i> (Kremp.) Halfellner & Cl. Roux [Magnusson, 1939]	X	
<i>Biatora cf. subduplex</i> (Nyl.) Printzen [Printzen, 1995; JV, 2008]		X
<i>Bryoria capillaris</i> (Ach.) Brodo & D. Hawksworth [JV, 2008]		X
<i>Bryoria fremontii</i> (Tuck.) Brodo & D. Hawksworth [Sipe, 1943]	X	
<i>Bryoria lanestris</i> (Ach.) Brodo & D. Hawksworth [Brodo & D. Hawksworth, 1977]	X	
<i>Bryoria pseudofuscescens</i> (Gyelnik) Brodo & D. Hawksworth [RD, 2008]		X
<i>Bryoria trichodes</i> (Michaux) Brodo & Hawksworth [MIN Herb.]	X	
<i>Caliciopsis calicoides</i> [non-lichenized fungus, JV 2008]		X
<i>Calicium glaucellum</i> Ach. [JV, 2008]		X
<i>Calicium viride</i> Pers. [JV, 2008]		X
<i>Calcoplaca holocarpa</i> (Hoffm. ex Ach.) A.E. Wade [JV, 2008]		X
<i>Candelaria concolor</i> (Dickson) Stein [JV, 2008]		X
<i>Cladonia chlorophaea</i> (Flörke ex Sommerf.) Sprengel [CRLA list]	X	
<i>Cladonia fimbriata</i> (L.) Fr. [Sipe, 1943]	X	
<i>Cladonia pyxidata</i> (L.) Hoffm. [CRLA park list]	X	
<i>Cyphelium inquinans</i> (Sm.) Trevisan [JV, 2008]		X
<i>Dermatocarpon miniatum</i> (L.) W. Mann [Sipe, 1943]	X	
<i>Dermatocarpon reticulatum</i> H. Magn. [MIN Herb.]	X	
<i>Diplotomma penichrum</i> (Tuc.) Szatala [RD, JV, 2008]		X
<i>Evernia prunastri</i> (L.) Ach. [CRLA park list]	X	
<i>Hypogymnia enteromorpha</i> (Ach.) Nyl. [MIN Herb.; CRLA park list]	X	
<i>Hypogymnia imshaugii</i> Krog [RD, KM, JV, 2008]		X
<i>Hypogymnia tubulosa</i> (Schaerer) Hav. [RD, 2008]		X
<i>Japewia carrollii?</i> [possible misidentification, consult with McCune; RD, 2008]		X
<i>Kaernefeltia merrillii</i> (Du Rietz) Thell & Goward [JV, 2008]		X
<i>Lecania cyrtella</i> (Ach.) Th. Fr. [JV, 2008]		X
<i>Lecanora applegatei</i> Herre [Herre, 1944; MIN Herb.]	X	
<i>Lecanora carpinea</i> (L.) Vainio [JV, 2008]		X
<i>Lecanora circumborealis</i> Brodo & Vitik. [Sipe, 1943]		X
<i>Lecanora polytropa</i> (Hoffm.) Rabenh. [Sipe, 1943]		X
<i>Lecanora pringlei</i> (Tuck.) Lamb [Sipe, 1943]		X

<i>Lecanora rupicola</i> (L.) Zahlbr. [Sipe, 1943]	X
<i>Lecanora symmicta</i> (Ach.) Ach [JV, 2008]	X
<i>Lecanora varia</i> (Hoffm.) Ach. [JV, 2008]	X
<i>Lecanora zosterae</i> (Ach.) Nyl. [JV, 2008]	X
<i>Lecidea auriculata</i> Th. Fr. [Sipe, 1943]	X
<i>Lecidea cascadensis</i> H. Magn. [Magnusson, 1939; Sipe, 1943]	X
<i>Lecidea fuscoatra</i> (L.) Ach. [Sipe, 1943]	X
<i>Lecidea leucothallina</i> Arnold [Anderson, 1965]	X
<i>Lecidea pumicicola</i> H. Magn. [Sipe, 1943]	X
<i>Lecidella asema</i> (Nyl.) Knoph & Hertel [RD, 2008]	X
<i>Lecidella stigmata</i> (Ach.) Hertel & Leuckert [Magnusson, 1939; Sipe, 1943; Hertel, 1931]	X
<i>Lepraria</i> sp. Ach. [JV, 2008]	X
<i>Lepraria incana</i> (L.) Ach. [RD, 2008]	X
<i>Letharia columbiana</i> (Nutt.) J.W. Thomson [KM, 2008]	X
<i>Letharia vulpina</i> (L.) Hue [Sipe, 1943; MIN Herb.; CRLA park list]	X
<i>Melanelia subargentifera</i> (Nyl.) O. Blanco et al. [Herre, 1946]	X
<i>Melanohalea subolivacea</i> (Nyl.) O. Blanco et al [JV, 2008]	X
<i>Nephroma resupinatum</i> (L.) Ach. [CRLA park list]	X
<i>Nodobryoria abbreviata</i> (Müll. Arg.) Common & Brodo [RD, JV, 2008]	X
<i>Nodobryoria oregana</i> (Tuck.) Common & Brodo [Sipe, 1943]	X
<i>Ochrolechia juvenalis</i> Brodo [RD, JV, 2008]	X
<i>Ochrolechia oregonensis</i> H. Magn. [JV, 2008]	X
<i>Ophioparma rubricosa</i> (Müll. Arg.) S. Ekman [Kalb & Staiger, 1995]	X
<i>Ophioparma ventosa</i> (L.) Norman [MIN Herb.]	X
<i>Parmelia sulcata</i> Taylor [Sipe, 1943]	X
<i>Parmeliopsis ambigua</i> (Wulfen) Nyl. [KM, 2008]	X
<i>Parmeliopsis hyperopta</i> (Ach.) Arnold [RD, 2008]	X
<i>Peltigera canina</i> (L.) Willd. [CRLA park list]	X
<i>Peltigera rufescens</i> (Weiss) Humb. [Thomson, 1950; CRLA park list]	X
<i>Platismatia glauca</i> (L.) Culb. & C. Culb. [CRLA park list]	X
<i>Pleopsidium flavum</i> (Bellardii) Körber [Sipe, 1943; MIN Herb.]	X
<i>Porpidia macrocarpa</i> (DC.) Hertel & A.J. Schwab [Sipe, 1943]	X
<i>Pseudephebe minuscula</i> (Nyl. ex Arnold) Brodo & D. Hawksworth [CRLA park list]	X
<i>Pseudephebe pubescens</i> (L.) M. Choisy [Magnusson, 1939; Sipe, 1943; CRLA park list]	X
<i>Pseudocyphellaria anthraspis</i> (Ach.) H. Magn. [CRLA park list]	X
<i>Ptychographa xylographoides</i> Nyl. [JV, 2008]	X
<i>Pyrrhospora cinnabarina</i> (Sommerf.) M. Choisy [JV, 2008]	X
<i>Pyrrhospora russula</i> (Ach.) Hafellner [Sipe, 1943]	X
<i>Ramalina farinacea</i> (L.) Ach. [Sipe, 1943]	X
<i>Ramboldia elabens</i> (Fr.) Kantvilas & Elix [Sipe, 1943]	X
<i>Rhizocarpon geminatum</i> Körber [Magnusson, 1939]	X
<i>Rhizocarpum geographicum</i> (L.) DC. [Magnusson, 1939; Sipe, 1943]	X
<i>Rhizoplaca melanophthalma</i> (DC.) Leuckert & Poelt [Magnusson, 1939]	X
<i>Rimularia grizans</i> (Nyl.) Hertel & Rambold [JV, 2008]	X
<i>Solorina crocea</i> (L.) Ach. [Sipe, 1943]	X
<i>Staurothele drummondii</i> (Tuck.) Tuck. [Thomson, 1991]	X
<i>Trapeliopsis granulosa</i> (Hoffm.) Lumbsch [Sipe, 1943]	X
<i>Tuckermanopsis chlorophylla</i> (Willd.) Hale [RD, JV, 2008]	X
<i>Tuckermanopsis platyphylla</i> (Tuck.) Hale [KM, 2008]	X
<i>Umbilicaria decussata</i> (Vill.) Zahlbr. [Sipe, 1943]	X
<i>Umbilicaria hyperborea</i> (Ach.) Hoffm. [Sipe, 1943; Llano, 1950; MIN Herb.]	X
<i>Umbilicaria krascheninnikovii</i> (Savicz) Zahlbr. [Llano, 1950; MIN Herb.]	X
<i>Umbilicaria phaea</i> Tuck. [Llano, 1950]	X
<i>Umbilicaria torrefacta</i> (Lightf.) Schrader [Sipe, 1943; Llano, 1950; MIN Herb.]	X
<i>Umbilicaria vellea</i> (L.) Hoffm. [Sipe, 1943; Llano, 1950]	X
<i>Umbilicaria virginis</i> Schaerer [MIN Herb.]	X

<i>Usnea filipendula</i> Stirton [CRLA park list]	X
<i>Vulpicida canadensis</i> (Räsänen) J.-E. Mattsson & M.J. Lai [CRLA park list]	X
<i>Xanthoparmelia conspersa</i> (Ehrh. ex Ach.) Hale [CRLA park list]	X
<i>Xanthoria elegans</i> (Link) Th. Fr. [Magnusson, 1939; Sipe, 1943; MIN Herb.; CRLA park list]	X
<i>Xanthoria polycarpa</i> (Hoffm.) Th. Fr. ex Rieber [JV, 2008]	X

## Summary

The previous NPS list includes 63 species, plus a type species listed as *Aspicilia tenuis* H. Magn. This species is placed in brackets on the NPLichen data base and it does not appear in either McCune and Geiser (2000) or in Brodo et al (2001). The BioBlitz team reported 36 new CRLA park records for lichens, plus the identity of a non-lichenized species. One of the forms, a *Lepraria*, was not identified to species; one form tentatively identified as *Japewia carrollii*, needs to be verified. Not including these forms would bring 34 new records to the park. This brings the lichen biodiversity list to 97 species, with a few forms yet to be determined.

## References (NPLichen)

NP Lichen Database 4.0: [www.ies.wisc.edu/nplichen/park/php?park=Crater+Lake&choice1=species](http://www.ies.wisc.edu/nplichen/park/php?park=Crater+Lake&choice1=species). Developed as a web-based database for lichens by James P. Bennett (USGS and U. Minn., Madison) and Clifford M. Wetmore, U. Minn., St. Paul. Downloaded 28 January 2009).

MIN Herb. = University of Minnesota Herbarium

Anderson, R. 1965. Additions to the lichen flora of North America, I. *The Bryologist* 68:54-63.

Brodo, I. and D. Hawksworth. 1977. *Alectoria* and allied genera in North America. *Opera Botanica* 42: 1-164.

Herre, A. 1944. A new *Lecanora* from Crater Lake National Park. *The Bryologist* 47: 91-92.

Herre, A. 1946. The Parmelias of California. *Contrib. Dudley Herb.* 3: 313-350.

Hertel, H. 1971. Über Holarktische Krustflechten aus den Venezuelianischen Anden. *Willdenowia* 6: 225-272.

Kalb, K. and B. Staiger. 1995. Rindenbewohnende Arten der Flechtengattung *Phioparma* in Amerika. *Bibl. Lich.* 58: 191-198.

Llano, G. 1950. A monograph of the lichen family Umbilicariaceae in the Western Hemisphere. Office of Naval Research, Navexos, P-831.

Magnusson, A. 1939. Western American lichens, mainly from Oregon. *Meddl. Göteborgs Bot. Trädg.* 13: 237-253.

Sipe, F. 1943. Lichens of Crater Lake National Park. *The Bryologist* 46: 135-138.

Thomson, J. 1950. The species of *Peltigera* of North America north of Mexico. *Amer. Midl. Naturalist* 44: 1-68.

Thomson, J. 1991. The lichen genus *Staurothele* in North America. *The Bryologist* 94: 351-367.

## References (Additional)

Brodo, I.M., S.D. Sharnoff, and S. Sharnoff. 2001. Lichens of North America. New Haven, CT: Yale University Press, 795 pp.

McCune, B. and L. Geiser. 2000. *Macrolichens of the Pacific Northwest*. Corvallis: Oregon State University Press, 386 pp.